

## An Interactive Health Communication Program For Young Urban Adults with Asthma

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<b>Organization:</b>	Regents of the University of Michigan
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**Summary:** Asthma is a condition in which health care disparities and inequities are observed. Emergency department visits, hospitalizations, and mortality rates are often 3-to-5 times higher for African Americans than Caucasians. African Americans aged 18-30 have some of the highest asthma prevalence rates, as well as very poor measures of asthma control. This is due in part to the fact that young adulthood represents a dramatic change for an individual, when for the first time they may be responsible for their own health care, finances, education, and employment.

An Internet-based interactive health communication program offers a unique way to address challenges and improve asthma care for this population. It provides a mechanism to deliver asthma education, personalize recommendations, and improve communication with health care providers at a time convenient to the participant. Such a program can be provided with minimal human support, making it ideal for urban environments that may not have the resources for health educators.

This project is developing such a program based on the self-regulation theory of behavior, which will enhance participants' ability to self-manage this chronic condition. Focus groups will be utilized to ensure that the participant's perspective is fully conveyed. The findings from the focus groups will be incorporated into a multi-session Internet-based intervention. This intervention will incorporate both standard asthma education delivered by video and personalized messages about how to overcome each individual's specific challenges. Asthma-specific outcomes, including quality of life, asthma symptoms, asthma control, self-efficacy, and health care utilization, will be assessed at 3 and 6 months.

Patient participants will be asked to categorize features they found particularly useful, as well as those that were of little value. Specific information regarding the number and length of session, level of detail of the session, access to the program, timeliness of responses, contact with the primary care physician (PCP), and suggestions for improvement will be assessed.

Using a brief email survey, the project will assess each physician's responses on the helpfulness, drawbacks, and areas for improvement of the PCP contact intervention feature.

The primary outcome will be an assessment of the feasibility of the Internet-based tailored asthma intervention. The secondary outcomes will be an assessment of asthma-related quality of life, symptom status, asthma control, self-efficacy, and health care utilization (emergency department visits, hospitalizations, and unscheduled office visits).

**Specific Aims:**

- Determine challenges to asthma management and investigate the benefits and potential pitfalls of an Internet-based asthma intervention for young adult African American patients. **(Ongoing)**
- Develop a consumer health informatics application for young adult asthma patients in urban areas. **(Ongoing)**
- Determine the feasibility of using a health informatics application as a way to improve asthma-specific outcomes. **(Upcoming)**

**2012 Activities:** Focus groups to inform the first aim were conducted during this period. Questions focused on the patients' challenges and goals, including control of their asthma, and preferred intervention delivery methods, including emails, Internet, and text messaging. A total of 35 individuals participated in the focus groups. As last self-reported in the AHRQ Research Reporting System, project progress and activities are on track and budget spending is on target.

**Preliminary Impact and Findings:** The project has no findings to date.

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**Target Population:** Acute Respiratory Infections, Adults, Asthma, Chronic Care\*, Inner City, Racial or Ethnic Minorities\*, Uninsured

**Strategic Goal:** Develop and disseminate health IT evidence and evidence-based tools to support patient-centered care, the coordination of care across transitions in care settings, and the use of electronic exchange of health information to improve quality of care.

**Business Goal:** Implementation and Use

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*\*This target population is one of AHRQ's priority populations.*